

THE LITTLE ENGINE THAT COULD, THE "SHAY"

Any reasonable glimpse of Mackay's mining past would not be complete without mention of the Shay railroad that operated on the mountain side above Mackay in the early 1900's. To say that it played a significant role in early development of the mines would be an understatement.

In 1901 a spur line of the Oregon Short Line was routed to the present site of Mackay, in large measure, to service the copper mines above the town. Not only was the village of Mackay then born, but a large smelter was constructed which in turn prompted the need for a speedier and more efficient way to bring the ore down from mines; more efficient than the pack mules used early on and even an electric railway system the earliest mine owners tried and found uneconomical. The latter included many problems with the laying of track and the distribution of electric current along its route, but mining officials found its biggest drawback the high cost of operation. Coal was needed to fuel the electric generating plants on the "Hill" and at the smelter that furnished power to the "motors", as the electric engines were called. The high cost of coal and getting it up the mountain was too expensive. It would be the Empire Copper Co.'s manager, a Frank Leland, who would come up with a better alternative. Mr. Leland, who had previous experience with a scenic mountain railway in Colorado where the Shay geared locomotive was used, saw immediately that the Shay had the power requirements needed here. He would overcome the problems of laying track over the seven miles of rough terrain and a steep 6% grade with many horseshoe curves, and an engine and ore cars were ordered from the Lyma Locomotive and Machine Co. of Lyma, Ohio.

In December of 1905 the 63000 lb. Shay engine # 1551 was put in commission by Frank Sweeney company master mechanic, and soon had it pulling its 10 ton capacity ore cars 60 miles/day, seven days/week, up and down the 36" gauge track to the mines and back. The little railroad's route went from the large smelter works just across the river from Mackay and wound its way up the mountain side, about seven miles, to the Alberta level (700 ft. level) to the ore loading bins that spanned the tracks. Once the ore cars were filled from these overhead bins, the engine, unable to turn around, merely came down the hill to the smelter in reverse. The Shay engine, due to its unique gearing design had pulling power that was amazing! A design capacity of 1520 tons on the flat and 72 tons on a six percent grade. It proved capable of pulling 10 ore cars, filled with coal and other supplies, and often a caboose (about 45 tons plus the weight of the 23 ton engine) **up** the hill and was able to handle the same 10 cars loaded with copper ore (a total of 140 tons) **down** the hill. The Shay proved so successful that in 1907 another engine, # 1552, was purchased and placed into service. The Shay railroad would prove to be a very worthwhile investment for the Empire Copper Co. and would be kept busy for a number of years until the aerial tramway came on line in 1918.

Further information about the "Shay" railroad can be found in old copies of the Mackay Miner newspaper. 1910--Apr. 7, Oct. 6; 1914--Apr. 9; 1915--June 2; 1916--Feb. 23; 1920--June 29, July 13, and Sept. 14;)

THE SHAY'S LAST DAYS

An earlier article dealt with the specifics of the Shay railroad that operated on the mine hill in the early 1900's. It was very instrumental in the development of mining activity of the day and it figured prominently in the economy and development of Mackay and the area.

From the day of its inaugural trip from the smelter to the mines in 1905, the miners and their families were assured a speedy and efficient method to get the fruits of their labors to market. The Shay became a permanent and familiar sight as it chugged its way up and down the hill, its whistle signaling a prosperous mining activity and money in the miners pockets. As with any mining operation, activity fluctuated with the price of metals and there were periods when the Shay's use was cut back accordingly. But then there were often periods of tremendous activity, as in 1916, that required as many as five round trips/day with as many as nine ore cars in tow. Quite often miner family members, locals and even a tourist or two would take a sight seeing ride on the Shay's round trip. The view was breath taking and a real treat.

Ironically, it was probably the optimistic future of the mines on the "hill" and good prices for the ore that spelled the end of the Shay's era. The future demanded an even faster and more economical way to get the ore from mine to smelter. Then too, there were the winter months, with snow covering and drifting the many horseshoe bends in its route up the hill, that posed special problems and delays in getting ore down the hill. Quite often the Shay was unable to get through in spite of being outfitted with a snow plow and its exceptional "snow bucking" qualities.

In 1917 construction of an aerial tramway commenced, and by 1918 the tramway was put into service bringing the ore down even faster and more cheaply. The end of the "Shay" railroad was at hand. Not much is on record as to the date and the final disposition of the Shay engines, cars, and equipment, but some local old timers remember them being sold and shipped off for use in mines in Russia. By 1921 the tracks and ties from the "Shay's" switch backed path up the "mine hill" had all been removed, the roadbed graded and smoothed up, and the entire 7 mile route to the top opened to automobile traffic. According to the Sept. 14, 1921 issue of the Mackay Miner auto tourism was flourishing through Mackay and a popular highlight was a trip up the mountain side over the old "Shay" route.

A sense of what used to be can be gained by hiking the old Shay roadbed, across its trestles, and around its horseshoe curves, to the old mining sites on the hill. Included here is a poem written by an unknown bard of the Shay's heyday. It sums up quite well what significance the little railroad played in the lives of Mackay's earliest residents.

" THAT OLD SHAY WHISTLE"

How dear to my heart is the sound of that whistle
When up from the smelter, the shay wends its way--
That deep sounding whistle, that joy bringing whistle,
That echoing whistle, that comes from the shay.

The engine, the workman, the ore cars and payroll,
The miners at work in the big copper mines;
No sound is so welcome to folks who owe bills,
As the sound of that whistle that comes from the hills.